

APPENDIX O

DIVING OPERATIONS BY CONTRACT

1. The Division Commander will appoint a Division Dive Coordinator who is responsible for organizing, integrating and monitoring the total dive program within the Pacific Ocean Division. The Division Dive Coordinator will provide program guidance and annually review the MSC dive program at District levels. The Division Dive Coordinator must have completed the required HQUSACE training.

2. The District Commander will appoint a District Dive Coordinator (DDC) and alternate who is responsible for organizing, integrating and monitoring the total dive program within the District. The DDC and the District Safety Representative (DSR) can not be the same person. The DDC must have completed the required HQUSACE training. Duties include:

- Reviews all Safe Practices Manuals
- Establishes District Dive Policy and ensures regulations are kept updated
- Reviews medical certificates
- Reviews all applicable contracts to ensure dive requirements are included
- Reviews dive team qualifications and experience to ensure compliance with EM 385-1-1
- Advises project managers on alternatives to and methods of diving (per-award possible)
- Reviews and accepts all dive plans
- Ensures all dive operations in the District are physically monitored
- Ensures the District has ample personnel trained as dive inspectors to monitor both contract and in-house dive operations
- Obtains funds from District overhead and project specific accounts as appropriate
- Ensures that all assigned personnel have appointment letters

3. The District Commander will appoint District Dive Inspector(s). The diving inspector is the District representative at the dive site. The dive inspector is responsible for ensuring that the dive operation is adequately planned, equipped and staffed in accordance with the accepted dive plan. He has the authority to delay or stop a dive at any time. His sole responsibility is the safe conduct of the diving operation. Either the DDC or Dive Safety Representative may be appointed Dive Inspector duties. The Dive Inspector must have completed the required HQUSACE training. Duties include:

- Ensures adequacy of specified equipment
 - Ensures compliance with accepted dive plan
 - Request changes of accepted dive plan with recommendations
 - Schedules time and travel for monitoring of dive operations
 - Recommends frequency of monitoring inspections
4. The District Commander will appoint a District Dive Safety and Occupational Health Office, Dive Safety Representative (DSR): This individual is assigned the responsibility of dive safety. The DSR must have completed the required HQUSACE training. Duties include:
- Periodically participates in on-site monitoring of dive operations
 - Actively participates in the review and comment process of all dive plans and activity hazards analysis in coordination with DDC
 - Assists with conducting accident investigation, determining cause and reporting dive accidents
5. Training requirements as required in EM 385-1-1 for rectification will be adequately funded and documented in the appropriate individual development plans.
6. In addition to the personnel described above, the Resident Engineer, Project Manager and Construction Representative at each project are charged with ensuring the efficient and safety of diving operations within their areas of responsibility. They have the authority to stop a dive operation but may not override a dive operation decision by the assigned diving inspector.
7. Contractor: The contractor is responsible for diving efficiently and safely adhering to all applicable regulations and the accepted dive plan.
- Contractor Safe Practices Manual - Each contractor will develop and maintain a safe practices manual. This manual will encompass the contractors entire dive program and be available at all times at the dive location to each dive team member. Three copies of this manual will be submitted 15 days in advance of the proposed diving operation to the DDC for acceptance.
 - Dive Plan - The contractor will prepare and submit for acceptance by the Corps of Engineers, a dive plan, included will be an activity hazard analysis. Three copies of this dive plan will be submitted 15 days in advance of the proposed diving operation to the DDC for review and acceptance, as outlined in EM 385-1-1.

- Diving Personnel - The contractor will provide sufficiently qualified personnel for each dive as defined in the Corps Safety Manual. EM 385-1-1. Recreational dive training such as PADI, NAUI and YMCA is not in itself considered adequate training for commercial diving activities.

- Diving Equipment - The equipment furnished by the contractor will be identified in the dive plan and will comply with EM 385-1-1.

- Diving Operations - All contractors diving operations at minimum will conform to EM 385-1-1, Section 30.

- Copies of all dive logs will be submitted to the DDC weekly.

- Surface Supplied Air (SSA) is the preferred method of conducting dive operations. SCUBA equipment will be employed only in instances where such equipment is significantly more effective than SSA without increased liability to the diver's safety. SCUBA diving operations shall not be conducted without specific, prior approval of the District Diving Coordinator (DDC).

- Mixed-Gas Diving Operations may be performed in accordance with the references listed.

- In no instances will free diving (breathhold) techniques be employed.

- Snorkeling will be permitted with an accepted dive plan.

8. A diving craft of ample size to support the diving operation will be available for all dives as determined by the DDC. The type craft to be used for any dive operation will depend upon the location of the dive, the number of personnel aboard and weather. The craft will be equipped with adequate first aid supplies and dive ladder or platform to assist the divers when entering or exiting the water. The diving craft or surface float will display the Divers Flag at all times when the diver(s) is in the water.

9. GENERAL:

- Diving operations in POD will be conducted in accordance with the provisions of this regulation and the referenced documents listed. Contracts issued for work or services within POD will reference this regulation whenever diving services may be required as part of the contract work. Where conflicting requirements exist the more conservative measure will be invoked. It must be realized that diving is an inherently hazardous activity. Each dive operation will be carefully planned and executed according to the accepted dive plan. Each dive operation will be properly supported with adequate contractor personnel. Budget and schedule requirements, while a consideration in scheduling a dive, are not justification to waive dive safety measures. Dive safety measures may only be waived in immediate life threatening situations.

- Prior to solicitation for diving services, the contracting office, the technical manager and/or the project manager will coordinate with the DDC to ensure all diving requirements are understood and incorporated in contract documents. Commercial diving companies may be pre-qualified prior to commencing diving operations for the District. In order to be found qualified, the dive company must have a demonstrated knowledge and expertise in the type of diving operation to be performed according to the standards established by the Division Diving Coordinator.

- Verification of dive team qualifications, experience, and medical records to include divers, dive supervisors and tenders will be submitted to the DDC for review and acceptance. A lack of experience or qualification to perform the task will be cause for rejection of the dive plan. Divers, dive supervisors and tenders may be pre-qualified individually according to the standards established by the MSCs USACE Diving Coordinator.

- The Division Dive Coordinator may elect to implement and enforce more conservative diving requirements, but under no circumstances will the operational requirements be less than specified in this appendix.

References

AR 40-3

AR 385-10

EM 385-1-1, U.S. Army Corps of Engineers *Safety and Health Requirements Manual*, Section 30, CONTRACT DIVING OPERATIONS, dtd 3 Sept. 1996.

NAVSEA 0994-LP-0910 and NAVSEA 0994-LP00I-0920, *U.S. Navy diving Manuals*, dtd Sept. 1995.

Occupational Safety and Health Standards, 29, CFR 1910, Subpart T.

Association of Diving Contractors (ADC) *Consensus Standards For Commercial Diving Operations, Fourth Edition*, 1992 change 1, 1994.

The National Oceanic and Atmospheric Administration (NOAA) *Diving Manual*, Diving for Science and Technology.